

The average temperature of the Universe is?

## 2.73 Kelvin (3 Kelvin acceptable)

correct: move ahead 2 spaces wrong: stay where you are



These are found in the middle of planetary nebulae

#### white dwarfs

correct: move ahead 2 spaces wrong: go back one space



Temperature extremes are measured using this scale

#### Kelvin

correct: move ahead 1 space wrong: go back one space



The approximate Celsius temperature for 0 K is

## -273° C

correct: move ahead 2 spaces wrong: stay where you are



The temperature that must be reached in order to start nuclear fusion

# 15 Million degrees Kelvin

correct: move ahead 1 space wrong: go back one space



Helium fuses at what temperature

## 100 million degrees Kelvin

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A main sequence star like our sun will begin to collapse when all the \_\_\_\_\_\_ is burned?

#### hydrogen

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Fusion cannot occur past iron because – energy is used rather than released

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Massive stars will continue the fusion process until what element is created.

#### Iron

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Observers looking at an object moving away see light that has a longer wavelength than it had when it was emitted. This is called a redshift correct: move ahead 1 space wrong: go back one space



Observers looking at an approaching source see light that is shifted to shorter wavelengths. This is called: blueshift.

correct: move ahead 1 space wrong: go back one space



The abbreviation for astronomical unit is

#### a.u.

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The method to determine whether an object is moving toward you or away by analyzing a spectrum is the Doppler shift or effect.

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Most heavy elements in our universe are created through supernovae explosions

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If the mass limit is exceeded for a neutron star it becomes a

#### black hole.

correct: move ahead 1 space wrong: go back one space



Stars are formed from material in

## nebulae.

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Give an example of a baryon.

#### Protons or neutrons

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